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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,376	11/21/2001	Koichi Okada	Q66493	1313

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EXAMINER

LAM, ANDREW H

ART UNIT PAPER NUMBER

2625

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/989,376		OKADA, KOICHI	
	Examiner		Art Unit	
	Andrew H. Lam		2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 12 January 2006.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-19 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-19 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____. 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____.
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DETAILED ACTION

- This action is responsive to the following communication: an Amendment filed on 01/12/06.
- Claims 1-19 are pending in the present application. Claims 1,2, 8 and 14 are amended.

Claim Objections

Claim 2 is objected to because of the following informalities: on page 4 of the amendment, line 4, "said image recording position detecting unit" should be "said position detecting unit". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6-10, 12-16 and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Stephenson (U.S. Patent No. 5,140,340) hereinafter Stephenson.

Regarding claim 1, Stephenson discloses an image recording apparatus (fig. 1, printer 7) comprising: an image recording unit (fig. 1, print head 8) which records an image (col. 5, lines 3-5) on an image recording material (fig. 1, print media 12); a transporting unit (fig. 1, transport platen 10) which transports said image recording material whose shape has at a least one side (see fig. 1) in a predetermined transporting direction (col. 4, lines 15-25); a position detecting unit (fig. 1, position sensor

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16) for said image recording material which detects a position of said image recording material in said at least one side (col. 4, lines 24-26, detect the two edges) along said predetermined transporting direction (see figs. 1 and 2); and an image recording position correcting unit (fig. 1, data conditioner 18) which allows said image recording unit to correct (col. 6, lines 7-10) an image recording position for said image recording material based on result of detection of said position of said image recording material in said at least one side by said position detecting unit so that said image can be recorded correctly at a position to be recorded on said image recording material transported as it is by said transporting unit without correcting said detected position of said image recording material (col. 6, lines 10-23); wherein a desired image is recorded on said image recording material at the corrected image recording position by said image recording unit (col. 6, lines 14-16, see fig. 4).

Regarding claim 2, Stephenson discloses an image recording apparatus according to claim 1, said position detecting unit detecting an inclination (see figs. 2 and 4) with relative to said transporting direction of said material during transporting from a plurality of portions along said side obtained using said image recording position detecting unit (col. 5, lines 41-68) and said image recording position correcting unit correcting a present position of said image recording material depending on said inclination (col. 6, lines 7-10).

Regarding claim 3, Stephenson discloses an image recording apparatus according to claim 1, said position detecting unit having a laser length measuring unit (col. 6, lines 1-5).

Regarding claim 4, Stephenson discloses an image recording apparatus according to claim 1, said position detecting unit having a transmission-type detecting unit or a reflection-type optical detecting unit (col. 6, lines 55-60).

Regarding claim 6, Stephenson discloses an image recording apparatus according to claim 1, said image recording material being a rectangular (see fig. 2, print media 12) and/or flexible film.

Regarding claim 7, Stephenson discloses an image recording apparatus according to claim 1 being a thermal printer (col. 4, line 6) or a laser printer.

Regarding claim 8, Stephenson discloses an image recording apparatus (fig. 1, printer 7) comprising: an image recording unit (fig. 1, print head 8) which records an image (col. 5, lines 3-5) on an image recording material (fig. 1, print media 12); a transporting unit (fig. 1, transport platen 10) which transports said image recording material whose shape has at least two (see fig. 1, print media 12) sides being opposite in a predetermined transporting direction (col. 4, lines 15-25); a position detecting unit (fig. 1, position sensor 16 and trigger sensor 14) for said image forming material which is arranged at positions of said at least two sides along said predetermined transporting direction (see, fig. 2); and which detects a size of said image recording material based on positions of said at least two sides along said predetermined transporting direction (see fig. 2, position sensor 16 and trigger sensor 14); and an image recording position correcting unit (fig. 1, data conditioner 18) which image recording position for said image recording material based on result of detection by said position detecting unit (col. 6, lines 7-10) wherein desired image is recorded on said image recording material

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at the corrected image recording position by said image recording unit (col. 6, lines 14-16, see fig. 4).

Regarding claim 8, Stephenson discloses an image recording apparatus according to claim 8, said position detecting unit having a laser length measuring unit (col. 6, lines 1-5).

Regarding claim 10, Stephenson discloses an image recording apparatus according to claim 8, said position detecting unit having a transmission-type detecting unit or a reflection-type optical detecting unit (col. 6, lines 55-60).

Regarding claim 12, Stephenson an image recording apparatus according to claim 8, said image recording material being a rectangular (see fig. 2, print media 12) and/or flexible film.

Regarding claim 13, Stephenson discloses an image recording apparatus according to claim 8 being a thermal printer (col. 4, line 6) or a laser printer.

Regarding claim 14, Stephenson discloses an image recording apparatus (fig. 1, printer 7) comprising: an image recording unit (fig. 1, print head 8) which records an image (col. 5, lines 3-5) on an image recording material (fig. 1, print media 12); a transporting unit (fig. 1, transport platen 10) which transports said image recording material whose shape is rectangular (see fig. 1, print media 12) in a predetermined transporting direction (col. 4, lines 15-25); a position detecting unit (fig. 1, position sensor 16) for said image recording material which detects an inclination (col. 5, lines 41-68) of said image recording material based on positions of at least two sides (col. 4, lines 25-26) along said predetermined transporting direction (see, figs. 2 and 4); and an image recording

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position correcting unit(fig. 1, data conditioner 18) allows said image recording unit to correct (col. 6, lines 7-10) an image recording position for said image recording material based on result of detection of said inclination of said image recording material based on positions of said at least two sides by said position detecting unit (col. 9) so that said image can be recorded correctly at a position to be recorded on said image recording material transported as it is by said transporting unit without correcting said detected inclination of said image recording material (col. 6, lines 10-23); wherein desired image is recorded on said image recording material at the corrected image recording position by said image recording unit (col. 6, lines 14-16, see fig. 4).

Regarding claim 15, Stephenson discloses an image recording apparatus according to claim 14, said position detecting unit having a laser length measuring unit (col. 6, lines 1-5).

Regarding claim 16, Stephenson discloses an image recording apparatus according to claim 14, said position detecting unit having a transmission-type detecting unit or a reflection-type optical detecting unit (col. 6, lines 55-60).

Regarding claim 18, Stephenson discloses an image recording apparatus according to claim 14, said image recording material being a flexible film (see fig. 2, print media 12, col. 1, lines 15-16).

Regarding claim 19, Stephenson discloses an image recording apparatus according to claim 1 being a thermal printer (col. 4, line 6) or a laser printer.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 11, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stephenson in view of Taniguchi et al (U.S. Patent 6,385,944) hereinafter Taniguchi.

Regarding claims 5, 11 and 17, Stephenson discloses an image recording apparatus according to claim 1, for detecting and correcting the skew angle of the image recording material in an image forming apparatus (see figs. 1 and 2).

Stephenson does not disclose expressly that the position detecting unit having a potentiometer provided with a lever capable of rotating around a shaft.

Taniguchi discloses a potentiometer with a lever for a printer. The potentiometer monitors the position that is, the width of the paper roll unit (col. 5, lines 35-60).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Stephenson as per teaching of Taniguchi because of the following reason: by using a potentiometer with a lever to detect changes to the position of an image recording material; a less costly position measuring device that is easier to implement in the image recording is achieved. This is more cost effective than using an optical sensor and light source combination which has more circuitry and is more expensive.

Response to Arguments

Applicant's arguments, see pages 9-13, filed 1/12/06, with respect to the rejection(s) of claims 1-4, 6-10, 12-16 and 18-19 under 102(b) and 5, 11 and 17 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art references due to newly amended limitations as cited in claims 1, 2, 8 and 14.

Contact Information

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew H. Lam whose telephone number is (571) 272-8569. The examiner can normally be reached on M-F (9:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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3/22/04

A handwritten signature in cursive script that reads "KA Williams", located in the center-right of the page.

**KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER**